REMARKS

Claims 1-20 are pending in the application. The pending claims have been canceled and replaced with new claims 21-40, which essentially correspond to the original claims. New independent claims 21 and 31 recite the synthesis of a modifying polymer from components not derived from the commercially available condensation polymer. This language is fully supported by the specification, at page 21, lines 6-8. Some of the original dependent claims have been revised to correct obvious typographical errors, and to more clearly define the invention. No new matter is presented by the amendments. Accordingly, applicants respectfully request entry thereof, and reconsideration of claims 21-40 in light of the following remarks.

Prior to addressing the merits of the rejections set forth in the Office Action dated March 29, 2005 ("the Action"), applicants believe that a brief summary of some of the embodiments of the invention will assist the Examiner in appreciating the differences between the embodiments and the art cited in the Action. Aspects of the invention related to modifying commercially available (e.g., already in commerce, or recycled) condensation polymers without degrading or breaking down the commercially available condensation polymer. The present inventors discovered a method of utilizing the high molecular weight of the commercially available condensation polymer, without degrading it or breaking it down through glycolysis or hydrolysis of the ester linkages, to make an even higher molecular weight polymer (see, pages 18 and 19 of the specification). The advantages of this process are set out on page 25 of the specification:

> The process of this invention eliminates many of the problems associated with the prior art. For instance as stated in much of the prior art the digestion of PET to reconstitute the original starting material is in many cases more expensive than the cost of manufacturing the starting materials. Once digested, the materials have to be re-condensed which is inherently energy inefficient and produces toxic levels of glycol and dioxane in the waste stream. Thus, only small amounts of PET are reprocessed in this manner. The present process eliminates these problems since it preserves the ester linkages already formed in the commercially available condensation polymer so that re-condensation of precursor materials is unnecessary.

The present specification, at page 25, line 14 to page 26, line 1.

The prior art cited in the Action as anticipating or rendering obvious the instant claims all degrades (depolymerizes, decreases the molecular weight, etc.) the commercially available condensation polymer. The embodiments reflected in the present claims specifically exclude degradation of the commercially available condensation polymer.

Turning now to the Action, claims 1-9 and 11-19 are rejected under 35 U.S.C. §102(b) as being anticipated by Brownscombe, *et al.*, U.S. Patent No. 5,554,657 ("Brownscombe"). Applicants respectfully traverse this rejection. The present inventors specifically exclude the process of Brownscombe, which requires degradation of the commercially available condensation polymer. Indeed, Brownscombe initially degrades commercially available PET by breaking it down into its monomeric units, which causes molecular weight reduction in the recovered PET product (col. 10, lines 58-64), and then reacts the degraded PET with virgin PET (e.g., not commercially available) to increase its molecular weight.

The present claims also recite the modifying polymer being comprised of components not derived from the commercially available condensation polymer. In Brownscombe, recycled PET is reacted with PET. Applicants therefore assume that the Examiner considers the virgin PET of Brownscombe to be the "modifying polymer." This PET, however, is derived from the same monomeric units as the commercially available condensation polymer, in direct contrast to the presently claimed embodiments. The process of Brownscombe therefore is excluded from the present claims. Applicants respectfully request that the Examiner reconsider and withdraw this rejection.

On page 2 of the Action, claims 1, 2, 4, 6-8, 11, 12, 14, and 16-18 are rejected under 35 U.S.C. §102(b) as being anticipated by Salsman, U.S. Patent No. 5,820,982 ("Salsman"). Applicants respectfully traverse this rejection. Salsman is discussed at length in the present application (pages 10, 11, and 26-28). For example, the examples reveal how Salsman is fundamentally different from the presently claimed embodiments. Here, the present applicants describe how the process of Salsman initially degrades the commercially available condensation PET by reaction with sulfoisophthalic acid and ethylene glycol (SIPEG), and then the molecular weight is built back up by reaction with phthalic anhydride (PA). Salsman specifically states that the commercially available condensation polymer is degraded in its process (col. 4, lines 20-26).

In sharp contrast to the Salsman disclosure, the present claims recite modifying a commercially available condensation polymer without degrading the condensation polymer. Salsman degrades the condensation polymer. Salsman therefore cannot anticipate the present claims. Accordingly, applicants respectfully request that the Examiner reconsider and withdraw this rejection.

On pages 2 and 3 of the Action, claims 1, 2, 4, 6-9, 11, 12, 14, and 16-19 are rejected under 35 U.S.C. §102(b) as being anticipated by Ito, *et al.*, U.S. Patent No. 6,534,624 ("Ito"). Applicants respectfully traverse this rejection. Like Brownscombe and Salsman discussed above, Ito requires degradation of the commercially available condensation polymer, which is excluded from the presently claimed embodiments. Ito requires "depolymerization" of the regenerated PES (recycled PET), and then esterification to form the alkyd resin (col. 3, line 58 to col. 4, line 5). Ito therefore cannot anticipate the claimed embodiments, and applicants respectfully request that the Examiner reconsider and withdraw this rejection.

Page 3 of the Action rejects claim 5 under 35 U.S.C. §112, first paragraph. Applicants have revised claim 5, now claim 25, (and claim 35), thereby obviating this rejection.

Also on page 3 of the Action, claims 5, 10, 15, and 20 are rejected under 35 U.S.C. §103(a) as being unpatentable over Ito. Applicants respectfully traverse this rejection. Ito fails to disclose the elements of independent claims 1 and 11 (now claims 21 and 31, respectfully) for the reasons noted above. Indeed, Ito teaches directly away from the presently claimed embodiments by requiring depolymerization of the commercially available condensation polymer. Ito therefore cannot render obvious any of the claims dependent upon the independent claims. Accordingly, applicants respectfully request that the Examiner reconsider and withdraw this rejection.

In view of the foregoing, applicants respectfully submit that the present claims are in condition for allowance. An early notice to this effect is earnestly solicited. Should there be any questions concerning this response, Examiner Acquah is invited to contact the undersigned at the telephone number listed below.

Should any additional fees be due with this or any other filing submitted in conjunction with this application, the Commissioner is hereby authorized to charge any such fees to the undersigned's deposit account no. 50-0206.

Respectfully submitted,

9/20/05
Date

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